

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

GEOTECHNICAL ENGINEERING BUREAU

PAVEMENT CONDITION & THICKNESS DESIGN GUIDELINES

INTRODUCTION

In recent years, the State of Georgia has firmly established a reputation for having some of the smoothest pavements in the nation. Pavement condition surveys and thickness designs are an integral part of most intersection and roadway projects. In most cases, the roadway designer is upgrading the existing pavement with an overlay or providing a completely new shoulder or traffic lane to accommodate increased traffic volume.

Traditionally, the Georgia Department of Transportation has performed pavement evaluations and designs in-house through the Bituminous Construction Branch. Recently, the task of designing overlays or new pavements has been passed to Consultants under the guidance of the Pavement Management Branch. The following notes should help document the current practice within the DOT with respect to pavement evaluation and design and direct the Consultant to the in-house DOT resources.

While the practice of pavement evaluation and design is still evolving based on active State and Federal research, most pavement condition evaluations in Georgia are currently being performed using guidelines found in “Road Surface Management Pavement Condition Evaluation System”, dated January 1996 as published by the Georgia Department of Transportation.

Similarly, pavement thickness designs are currently being performed using the AASHTO Interim Guide for Design of Pavement Structures, dated 1972 (Chapter III Revised 1981). In-house software entitled “Asphalt Pavement Design” that incorporates AASHTO methodology for flexible pavements is available for download at the DOT Website www.dot.state.ga.us under Preconstruction Services and Office of Consultant Design.